

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A receiver for a high speed transmission system for receiving a first signal ~~(B)~~ over a transmission path, said first signal ~~(B)~~ comprising a plurality of data symbols which are successively transmitted, in front of each ~~being of said plurality of data symbols having a first prefix~~ for avoiding an interference between said successively transmitted plurality of data symbols, said receiver comprising:

- means for generating ~~a second~~ a second prefix for each of said first prefix in front of each of said plurality of data symbols; and
- replacing means for replacing said first prefix, wherein by said second prefix, said second prefix respectively having a length longer than ~~that the length~~ of said first prefix to be replaced,

characterized by

- a buffer for buffering said first signal;
- a filter having a pass characteristic such that said first signal can pass comprising a first filter portion having a finite impulse response introducing zeros in the transfer function of said filter and a second filter portion having an infinite impulse response introducing poles in the transfer function of said filter;
- wherein said first filter portion is arranged in front of said replacing means with respect to said transmission path, and said second filter portion behind thereof.

2. (Currently Amended) A receiver according to claim 1, characterized by receiving a second signal ~~(A)~~ over said transmission path simultaneously with said first signal ~~(B)~~, said first signal and said second signal having different frequency bands, and said pass characteristic of said filter being such that said second signal ~~(A) cannot pass said filter.~~

is suppressed by

3. (Previously Presented) A receiver according to claim 1, characterized in that for a given data symbol, said second prefix is a part of said given data symbol.

4. (Currently Amended) A receiver according to claim 1, characterized by

- said buffer comprising a first buffer portion and a second buffer portion;
- a switching means for switching said transmission path to said first and second buffer portions such that successively transmitted ones of said plurality of data symbols are alternately buffered ~~in~~ into said first and second buffer portions.

5. (Currently Amended) A receiver according to claim 1, characterized in that, said means for generating a second prefix ~~generates said second prefix~~ with a length corresponding to a parameter derived from ~~a impulse response of said filter~~ said infinite impulse response of said second filter portion such that an interference of successive ones of said plurality of data symbols of said first signal (B) caused by transients of said filter is avoided.

6. (Previously Presented) A receiver according to claim 1, characterized in that said transmission path is a telephone line and said second signal is a telephone service or an ISDN service, *which is transmitted in a frequency band.*

7. (Previously Presented) A modem including ^{the} ~~a~~ receiver according to claim 1.

8. (Currently Amended) A method for receiving a signal (B) on a receiving side of a transmission system, said signal comprising data symbols and a first prefix in front of each of said data symbol ~~symbol~~ symbols for avoiding an interference of successively transmitted data symbols, comprising the following steps:

- receiving said signal on the receiving side;
- buffering said received signal;
- generating a second prefix for each of said first prefix in front of each of said data

symbols;

- replacing said first prefix by said second prefix, said second prefix having a length longer than ~~that the length~~ of said first prefix to be replaced;
- filtering said received signal, wherein said first prefix has been replaced by said second prefix, by means of a filter having a pass characteristic such that said received signal can pass, including firstly filtering said received signal with a first filter portion having a finite impulse response (FIR) introducing zeros in the transfer function of said filter before replacing said first prefix with said second prefix and secondly filtering said signal ~~(B)~~ wherein said first prefixes ^{has} ~~have~~ been replaced by said second prefixes ~~by~~ means of a second filter portion having an infinite impulse response (IIR) including poles in the transfer function of said filter.

9. (Previously Presented) A method according to claim 8, characterized in that for a given data symbol, said second prefix is generated by using a part of said given data symbol.

10. (Currently Amended) A method according to claim 8, characterized in that said buffering of said received signal ~~(B)~~ is performed by switching said transmission path to a first buffer portion and a second buffer portion such that successively received data symbols are alternately stored in said first and second buffer portion.

11. (Currently Amended) A method according to claim 8, characterized in that said second prefix is generated with a length corresponding to a parameter derived from ~~an impulse response of said filter~~ said infinite impulse response of said second filter portion such that an interference of successive data symbols of said signal ~~(B)~~ caused by transients of said filter is avoided.